Scaevola hobdyi (Goodeniaceae), an Enigmatic New Species from West Maui, Hawaiian Islands

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ABSTRACT. Scaevola hobdyi is a newly described species from the West Maui Mountains, Hawaiian Islands. It is unusual among the other Hawaiian species of Scaevola sect. Scaevola in its linear leaves, apparently small flowers, and compact habit. It is not clear if this species represents a separate introduction from the Australian region or is a highly specialized derivative of the primary Hawaiian lineage. This imperfectly known species has been collected only once and is likely extinct.

In 1980 Robert Hobdy, a Hawaii State Forester on Maui, collected a single specimen of a plant with tufted leaves and flower buds, but no flowers or fruit. It represented a plant that he had never seen before and he saw only a single individual along the 'Eke Trail on West Maui, a moderately disturbed wet forest area. He sent it to the Bishop Museum where Harold St. John annotated it as Lysimachia. Derral Herbst and I saw it several years later during the writing of the Manual of the Flowering Plants of Hawai'i but, because the specimen had no flowers or fruit, we were unable to place it in a family. Tim Flynn of the National Tropical Botanical Garden finally suggested that it represented an unusual member of the Goodeniaceae, a suggestion with which we agreed. I sent the specimen to Roger Carolin at the National Herbarium of New South Wales in Australia. He confirmed it as an undescribed species of Scaevola. Hobdy and other local botanists have repeatedly searched for additional plants of this species over the past decade without success. It has now been 15 years since its collection and it appears unlikely to be rediscovered. So, despite the lack of good material, because it is clearly highly distinctive, I am here describing it.

Scaevola hobdyi W. L. Wagner, sp. nov. TYPE:
U.S.A. Hawaiian Islands. Maui: West Maui,
Lahaina District, West Maui Mountains, along
'Eke Trail, 3250 ft. (990 m), 23 Oct. 1980,
R. Hobdy 930 (holotype, BISH-439628). Figure 1.

Scaevola foliis linearis spiraliter dispositis et caespitosis ad extremitates ramorum; floribus 1–3 axillaribus cymis lobis; calycis irregularibus, 0.5–1.5 mm longis; corolla immaturi 12 mm longi.

Small branched shrub, ca. 20-30 cm tall; stems branched from near the base of the plant, up to ca. 5 mm diam. when dried, the older ones glabrous, pale brown, young growth strigillose, green. Leaves spirally arranged, closely spaced toward the tips of the branches, forming tufts, linear, 4.5-8 cm long, 1.5-2 mm wide, the midrib conspicuously raised on the abaxial side, somewhat folded on the adaxial side, margins involute, strigillose, more densely so toward the base, and progressively sparser toward the apex, glabrate in age, the hairs unbranched, apex acute, sessile; axils with a tuft of pale tan hair. Flowers 1 to 3 in axillary cymes, arranged on elongating lateral branches; peduncle (in bud) 1-4 cm long; bracteoles, much smaller than the leaves, 5-8 mm long; sessile in bracteole axils. Sepals connate into an undulate rim at base, the lobes immature, irregular in length, 0.5-1.5 mm long. Corolla known from a single bud, asymmetrically fusiform, 12 mm long, strigillose externally, at least when very immature, more glabrate as it develops. Staminal filaments about the same length as the developing corolla tube, ca. 6.5 mm long. Anthers (developing) 3.5 mm long. Fruit unknown.

This distinctive species is known only from the holotype. Given the decadent status of the site where it was collected, the species is unfortunately probably extinct.

The axillary inflorescence structure and spiral leaf arrangement suggest that Scaevola hobdyi is a member of Scaevola sect. Scaevola following the classification scheme of Carolin (1990; Carolin et al., 1992). Of the three sections recognized by Carolin, only two have extra-Australian representatives, and only Scaevola sect. Scaevola extends beyond the Malesian region. All 10 of the Hawaiian endemic species are thus members of Scaevola sect. Scaevola, although they have diversified from at least three separate colonizations (Patterson, 1990, 1995), or perhaps only two colonizations (D. Ho-

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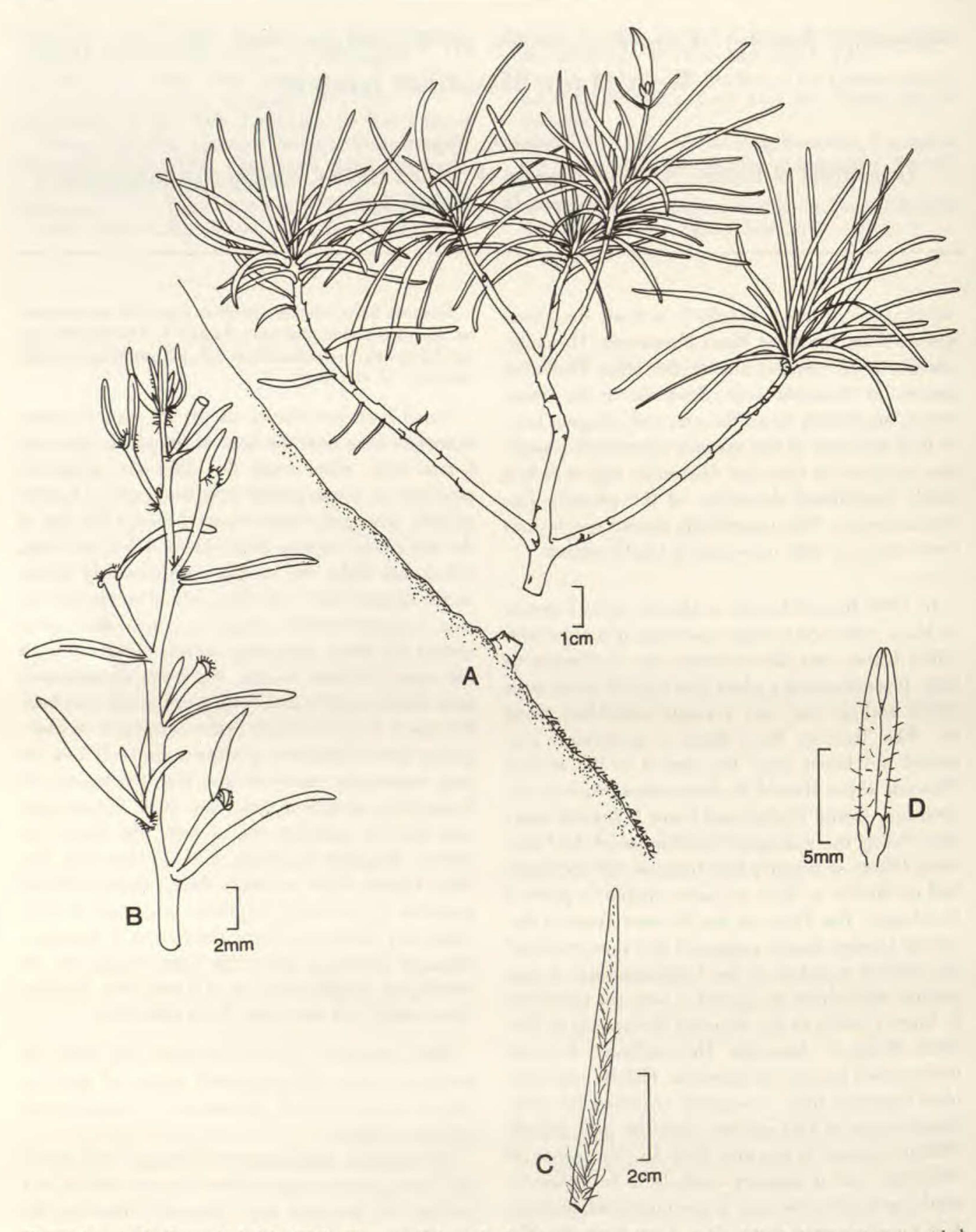


Figure 1. A-D. Scaevola hobdyi W. L. Wagner, all from the holotype and a 35-mm slide of the holotype plant provided by R. Hobdy. —A. Habit. —B. Post-flowering inflorescence. —C. Immature leaf, to show strigillose surface. —D. Immature bud, distorted by pressing.

warth & W. L. Wagner, unpublished). Scaevola hobdyi appears to have no close relationship to other Hawaiian species, and presumably represents a

Australia, adding one additional colonization to the numbers given above.

Etymology. I am pleased to honor Robert Hobdy, separate long-distance dispersal event directly from Forestry Manager, Maui District, Division of For-

estry and Wildlife, State of Hawaii, a superb naturalist and among those dedicated to preserving the natural resources of the Hawaiian Islands.

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